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ABSTRACT

In 1985, Virginia state law was amended to change the birth date for automatic eligibility for kindergarten from December 31 to September 30. The law allowed school districts to admit young children with birthdays from October 1 through December 31, provided the children were tested for kindergarten readiness. Testing for admission to school for children with December birthdays began in the fall of 1986. The law specified that children with November birthdays would be added in 1987 and children born in October added in 1988, so that afterwards, children with birthdays in the 3 months would be permitted entry into kindergarten at the discretion of the school superintendent. The law was interpreted by the state attorney general as holding that districts must test children whether or not the information obtained would be used. School districts responded to the law in many ways. Most districts used one of the tests tentatively approved by the state. Few heeded cautions that a single measure was inadequate for determining kindergarten readiness. About half used a specific cut-score or procedure for determining entry; about one-fourth did not use a fixed cut-score or used a variable one; one-fourth districts used no cut-score. While recent legislation would have fixed entry age at September 30 and eliminated the screening requirement, an amendment may continue kindergarten readiness screening for children who turn 5 in October, November, or December. (RH)

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Testing for Kindergarten Readiness: State Action and District Response

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Abstract

The General Assembly of the Commonwealth of Virginia addressed the issue of kindergarten entry age four times between 1973 and 1990. In 1985, the law was amended to change the birth date for automatic eligibility for kindergarten from December 31 to September 30. A provision in the law allowed school districts to admit young children with birthdays from October 1 through December 31 provided that the children were tested to determine their readiness for the local kindergarten program. The Virginia Department of Education was assigned the task of identifying tests for this purpose. Testing began for children with December birthdays for admission to school in the fall of 1986. The law specified that children with November birthdays would be added in 1987, with October born children added in 1988, so that thereafter children with birthdays in those three months would be permitted entry into kindergarten at the discretion of the school superintendent. The law was interpreted by the state Attorney General that districts *must* test children whether or not they intended to use the information. School districts responded to the law in many different ways; some began by testing only December born children, some began testing October-December born children in 1986, and many even began testing *all* children who appeared on the school doorstep for entry into kindergarten. Most districts used one of the tests tentatively approved by the state. Very few heeded cautions that a single measure was inadequate for determining kindergarten readiness. About half of the districts attested to using an articulated decision rule; that is, they used a specific cut-score or procedure for determining entry. One-fourth said that they did not use a fixed cut-score or that the cut score was variable. Another one-fourth stated that they used no cut-score from the test used. In 1990 the law was again changed. While the bill as introduced would have fixed entry age at September 30 and eliminated the screening portion of the law, an amendment in support of the continuation of transitional kindergarten programs may continue kindergarten readiness screening for those children who are five in October, November, or December.

Introduction

An increase in the amount of testing in the early grades has begun to receive justifiable attention in recent years. Individuals from all levels of influence on education, from the nation's legislators to the classroom teacher, have come to depend, for better or worse, on test scores to provide information on the status of education. Darling-Hammond and Wise (1985) provided an early observation of the nation's heavy and arguably inappropriate dependence on test scores. More recently, several organizations have made clear statements about early childhood assessment practice (*e.g.*, American Federation of Teachers, 1988; National Association for the Education of Young Children, 1988). At the beginning of this discourse, the Commonwealth of Virginia passed into law the *requirement* that certain young children would be tested to determine their readiness to enter kindergarten. This paper describes the state's and the school districts' reaction to that law.

State Action

Kindergarten entrance age in Virginia was addressed by the General Assembly four times in the past 17 years. Prior to 1973, a child could enter school if he or she reached his or her fifth birthday by September 30. In response to changes to entry age legislation by neighboring states, Virginia law was amended in 1972 to allow children who were five by December 31 to enter school. Legislators were responding in part to research which showed that children learned more easily and quickly in their early years than later in life. Allowing children to come to school three months earlier was an attempt to provide educational experiences to children as early as possible. In 1978, a subcommittee of the General Assembly studied several aspects of kindergarten, including entrance age. It was recommended at that time that no changes be made in entrance age. In the early 1980s, Virginia teachers and school administrators began supporting an increase in the kindergarten entrance age. Children were having increased difficulty in benefiting from a curriculum that was placing more emphasis on academic matter, and retention rates in kindergarten were increasing. To protect children from academic failure, teachers and administrators believed that raising the entrance age to protect academically unready or developmentally young children would solve the problem (Harris, 1989).

In 1985, the Virginia legislature revised the law affecting children with October, November, and December birthdays. Beginning in the fall of 1986, the birth date for automatic eligibility for kindergarten was "rolled back" from December 31 one month at a time so that by the fall of 1988 the birth date for automatic eligibility was September 30 (Eads & Trahan, 1987). Within the provisions of the law, however, children with birthdays as late as January 1 were allowed to enter kindergarten in Virginia at the discretion of the school superintendent. Another section of the law allowed parents to wait until a child was six until they were sent to school. The legal age of children allowed to enter kindergarten thus ranged from 4 years 9 months to 6 years 11 months (Harris, 1989).

Pressure from several sources influenced the General Assembly to take a compromise position concerning the entry of October-December born children. The legislators apparently attempted to satisfy both proponents of "traditional" kindergartens as well as those of escalating academic curricula in kindergarten. We could find no evidence that university or state department individuals with curriculum or assessment expertise were consulted on the matter prior to passage of the legislation during the January-March 1985 session. While there are many members of the General Assembly who repeatedly demonstrate strong support for appropriate care and education of young children, a primary purpose of the legislation appeared to be to satisfy opposing factions.[1] The legislation provided for automatic entry of children who were five years of age on or before September 30, but required the testing of each child with a birthday in October, November, or December, whose parent or guardian petitioned

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[1] Personal communication with Mrs. Grey Ritchie, retired Kindergarten Supervisor for the Virginia Department of Education.

for entry, to "determine his readiness for the kindergarten program" (Code of Virginia, 1985). While it was not possible to conclusively document the actual circumstances behind this initiative, this writer was told by a legislative aide that the entire debate concerning assessment consisted of one legislator saying "They make a test to do that, don't they? (referring to the *Gesell*) Let's test them.".[2]

The Virginia General Assembly required that schools begin the testing of target children for the 1986-87 school year. The Assembly provided no funds to the schools or the Department of Education (DOE) to assist in compliance with the law. The DOE convened a committee of public school and university early childhood specialists to help identify instruments that might be suitable for this purpose, especially since there was only one test, not held in high regard, that was professed by its developers to be designed and validated for the purpose of determining readiness for school. Six instruments were identified for a brief field test (Eads & Gressard, 1986) which resulted in the tentative approval of four instruments by Virginia Board of Education, the lay body appointed to oversee public education in the state. These were the *Brigance K & 1 Screen*, the *Developmental Indicators for the Assessment of Learning - Revised* (DIAL-R), the *Daberon Screening for School Readiness*, and the *Missouri Kindergarten Inventory of Developmental Skills - Alternate Form*. One additional instrument, the *Gesell School Readiness Screening Test*, was included for further study because of an apparent unwillingness on the part of using school districts ("divisions" in Virginia) to provide data for the initial field test. It was recommended by the selection committee that (1) school districts should be allowed to adopt screening procedures fitting their own needs, and that (2) because these needs varied greatly, the state should set no "cut score" for any of these tests. Strong recommendations were made that no one score should be used by itself to make entry determinations. School districts were also provided an option to develop or select their own procedures as an alternative to the use of one of the tentatively approved instruments. Upon the request of several school districts, a formal request to the state Attorney General's office was made to determine whether schools who wished to admit all children were required to use a test. The response was in the affirmative. Regardless of the "need" for the results, districts were required to test children.

The first author successfully argued before the State Board of Education for funds to undertake a longitudinal study of the efficacy of the tentatively adopted instruments and the impact on children of the program. All 133 Virginia school districts with kindergartens in Virginia were asked to participate in the study by supplying data to the DOE on children who were screened for kindergarten readiness. Of those, 74 initially agreed to participate, and 55 eventually supplied data on 2,395 children screened for entry for the 1986-87 school year and 2,129 for the 1987-88 school year.

School Division Response

As part of the study, the research team investigated *via* telephone survey the screening policies and practices of all districts across the state. There are three parts to this component of the study. First, we asked what birth month(s) or what portion of the children were screened and which tests were employed. Second, we determined how district policies varied in the specificity and flexibility of decision rules; that is, to what extent admission and placement policies were articulated. Third, we are currently analyzing how district characteristics, such as free lunch eligibility (as an indicator of overall socio-economic status), enrollment, and types of early grade transition alternatives, are related to decision rules.

Of 133 school districts, 129 provided information. Generally, early childhood or elementary education supervisors from the central offices were the respondents. These individuals were

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[2] Personal communication with a staff member (who must remain anonymous), Virginia Legislative Services. We suspect that this deliberation was not in keeping with the prerequisites for effective policy design recommended by Darling-Hammond & Wise (1985).

asked to describe the 1986-87 and 1987-88 screening policies, noting whether individual schools could or did modify the central policy.

Division response to state mandate. For the 1986-87 school year, Virginia law required districts to test only those children born in December (1981) whose parents had petitioned for "early" enrollment. As shown in Table 1, 52% of Virginia school district screened children with December birthdays. Another 12% tested children with October-December birthdays, even though the legislation would not require such testing for two more years. Over one-third of the districts screened all children entering kindergarten in 1986.

Table 1
Ages of Children Screened by School Divisions in 1986

Birth Month	Division Number[1]	Percent
December Only	67	52
October-December	15	12
All Months	47	36

[1] Four district classifications missing

When the cut-off birth date was rolled back to October 31 in 1987, districts were required to test children with November and December birthdays whose parents petitioned for their entry into kindergarten. Divisions testing only December-born children now had to also screen those with November birthdays. Three of these 67 districts elected to screen all prospective children. Only two districts in the state elected to test fewer children, switching from testing all children to only those they were required to test.

Table 2 shows the tests used for screening by Virginia districts. Nearly every district used one of the five tests tentatively approved by the Board of Education. DOE policy provided for the approval of use of other instruments or procedures. Four districts administered other screening instruments the first year; one district each administered the *Denver Developmental Screening Test*, the *Cognitive Skills Assessment Battery*, and the *Metropolitan Readiness Test*, Level 1, while the remaining district used the *Cooperative Preschool Inventory*, the *PMA Readiness Level*, and the *Hayes Early Identification Listening Response Test* in combination. The most commonly used instrument was the *Brigance*, which was administered by over half of the districts. The remaining districts selected fairly equally from the four other tentatively approved choices. In 1987, only five districts (4%) opted to switch and use another test from among the five tentatively approved tests. Very few districts apparently heeded the recommendation of the DOE that one test alone should not be used to determine kindergarten readiness.

Table 2
Screening Tests Used by School Divisions in 1986

Screening Test	Division Number	Division Percent
Brigance	73	56
Daberon	10	8
DIAL-R	16	12
Gesell School Readiness Screening Test	13	10
KIDS-AF	14	11
Other	5	4

Articulation of Decision Rules. Divisions varied in the degree to which decision rules were articulated. As Table 3 shows, performance standards were made explicit by one-half of the districts and one-fourth were less specific about their standards, *i.e.*, respondents did not detail the criteria employed in judging who of the October-December born children could enroll in kindergarten. The remaining quarter indicated that they did not require children to pass the screening test at a specific level of performance in order to come to school.

Table 3
1986 School Division Decision Rules

Type of Policy	Division Number[1]	Division Percent
Articulated	61	51
Fuzzy	28	24
No Cut-Score	30	25

[1]Ten districts could not be classified

In the 61 districts with explicit performance standards, informants said that students must earn a particular test score for entry into kindergarten. Although it is not known how these standards were derived in each district, it is suspected that most were selected on an *ad hoc* basis. That is, some districts appropriated cut-scores suggested by test authors, others selected cut-scores on the basis of the distribution of test scores in the districts and schools, and yet others chose standards that appeared to represent a minimum level of readiness. Although it is possible that some districts did so, none of them reported to have used the validation data (Eads & Gressard, 1986) provided by the state in the original field test to set cut scores.

Should children miss the test criterion, their fate would vary depending on the specific district. Most respondents indicated that failing the test led to denied admission for those children born after the cut-off date, or placement in junior kindergarten. One-half of the districts with explicit cut-scores used the *Brigance* in screening children. The modal (and median) standard on the 100 point test was 70, with a range from 33 to 85. All other things being equal, a child with a score of 65 could be labelled "ready" and admitted to school in one district but declared "immature" at another and told to stay home or spend two years in school

prior to first grade. Only four districts had preschool options for those who "failed". Only three districts indicated that failing the screen led to further testing.

The answers of our respondents were revealing to the extent that they spoke of counseling or advising parents to keep their December children home an extra year. The terms *counseling* and *recommending* were congruent with state law (Virginia General Assembly, 1985) for dealing with December-born (1986) or November/December-born (1987) children. However, in districts that offered junior kindergarten as an option, talk of counseling and recommending was conspicuously absent. Although parents were consulted on the matter of keeping a child in or out of school, they may not have been accorded the same regard in placement decisions.

It appears that in six of fifteen districts with a junior kindergarten option, children were sorted according to their performance relative to the cut-score. It is not known how sorting rules varied by schools within district or teachers within school. It was determined, however, that districts did not necessarily adhere strictly to the identified cut-score. Informants often remarked that the cut-score was not "set in stone" and served more as a flexible benchmark.

Among the 19 districts that tested all children and followed well-articulated decision rules, only four said that additional information (*e.g.*, teacher observations, another test, and/or anecdotal data) was used in advising parents or deciding on an examinee's fate. In contrast, districts that only tested children with October-December or December birthdays were much more likely to gather information from sources other than the screen. It may be that testing all children drains school district resources to the extent that there is little left over to gather additional data on children, resulting in decisions made from a partial and likely inadequate information base.

As noted earlier, 28 district respondents described policies in which performance standards were flexible, vague, or unarticulated. Although these district respondents did not identify a specific cut-score, the majority said that low scores were enough to prompt recommendations that children wait to enroll until the following year. Two of four districts with junior kindergarten options used screening results to place children in the two kindergarten tracks. Few districts indicated that they marshalled evidence from different sources to support their recommendations to parents and available data suggest that the recommendations put forth were more the product of individual discretion and judgments on the part of school principals and others who screened the children.

Finally, 30 districts indicated that no standard was applied to screening test performance and the majority admitted all children into kindergarten, young or old, high- or low-scoring. Only five of these districts had junior kindergarten options. Among the 19 districts that only screened December-born children, nearly half indicated that they communicated test results to parents and allowed them to decide whether their children would stay home or enter school in 1986 (even though the nominal policies of the districts were to admit all children).

Table 4 shows how districts that tested different age groups varied according to decision rule specificity. Divisions that tested December-born children were more likely to have specific performance standards or none at all. Very few had vaguely stated criteria. Conversely, those districts that tested October-December born children were equally likely to have specific or fuzzy standards. Fewer of these districts indicated that they admitted all students regardless of test scores.

Table 4
Crosstabulation of Age of Children Screened and Decision Rule by Districts

		Decision Rule			Row Total
		Articulated	Fuzzy	None	
All ages tested	(*n*)	19	15	9	43
	(*row percent%*)	44%	35%	21%	36%
	(*column percent*)	31%	54%	30%	
Fall born tested	(*n*)	6	6	2	14
	(*row percent*)	43%	43%	14%	12%
	(*column percent*)	10%	21%	7%	
December born tested	(*n*)	36	7	19	62
	(*row percent*)	58%	11%	31%	52%
	(*column percent*)	59%	25%	63%	
Column Total		61	28	30	119[1]
		51%	24%	25%	100%

(Chi-square-11.4, p=.02)
[1]Ten districts could not be classified

Division Rules and Division Characteristics. This section discusses the extent to which district characteristics (district size and SES) were associated with the different testing policies. We were not able to complete analysis of geographic location and kindergarten options in time for inclusion in this paper. We thought various demographic characteristics might be related to resource allocation that could affect program characteristics. Size of enrollment (by quartile) was neither related to who the districts tested (X^2 = 10.6, p=.10) nor the specificity of screening policies (X^2 = 4.6, p=.60). Although district SES was not associated with whom districts tested, it was related to policy specificity. Those districts with a greater proportion of poor children or children eligible for free or reduced lunch tended to have vague or no performance standards. Middle class and wealthier districts tended to have specific cut-scores as part of their screening policies.

Conclusions

Although a slight majority of the school districts tested only December-born children in 1986, over one-third of the districts in the state tested all entering kindergarten in that year. This represents a non-trivial amount of time and resources devoted to kindergarten screening. For thousands of five-year olds, the test administration may be their first introduction to public schools, teacher expectations, and success. Or failure.

Failure is inevitable in nearly half the districts as standards of competence or readiness are applied routinely. Perhaps children may not understand that they have failed the screening process, but we could hypothesize from Shepard & Smith (1987) that they sooner or later will fathom at least one of two things: either they had to spend another year away from the school

their brothers, sisters, and neighbors attended or they were put in a classroom different from that of their agemates. According to other data presented in this symposium (Walsh, Ellwein, Eads, and Miller, 1990), they have little hope for joining their peers in future classrooms.

Addenda

As noted in another paper at this symposium (Ellwein and Eads, 1990), the data have been able to provide us evidence that these instruments do not work particularly well in telling anyone whether a child is capable of surviving anyone's curriculum, regardless of how appropriate or inappropriate it is. The data have also given us an opportunity to analyze the broader effects of testing on early grade practices. The series of papers from this symposium is the initial attempt to provide some range of information derived from these data and put it before the research community for debate and critique. Daniel Walsh coined a compliment in the desperate struggle to maintain a semblance of order to the data collection process: "Thank God for Alix" -- without whom this effort would have gone to a relatively warm environment in a handbasket. To that the first author would add thank God for Daniel, Mary Catherine, the incredibly hard working graduate students, and the resilience of most children to survive what we do to them. We are now (and will continue for some time to be) deeply indebted to the hundreds of people in the schools upon whom the burden of finding records and reporting data to us fell. We must also deeply thank the Board of Education for approving the funding of this project (whether or not they like its findings), and the first author's wonderfully supportive bosses (honest -- in a civil service bureaucracy, no less) for their continuing encouragement.

This year the law was changed tagain. A bill was introduced to amend the law to fix the entry age at September 30. An amendment attached to the bill, however, exempted school districts offering transitional programs (*e.g.*, junior kindergartens or transitional first grades). Therefore, in spite of well publicized evidence (Shepard & Smith(1986), Shepard & Smith (1989), Center for Policy Research in Education, (1990)), school districts will be encouraged to continue or develop transitional programs *via* offering entry of "young" children into two year kindergarten tracks. There may be some hope, however. First, the law *might* be interpreted such that *only* those children with October, November, or December birthdays will be candidates for junior kindergartens. Age disparity would then not be exacerbated, and perhaps these programs would become precursors to the currently politically desirable "programs for 'at-risk' four-year-olds" in Virginia. Second, those portions of the law pertaining to the *testing* of the October-December born children have been deleted, thus *it appears to be* ending the requirement for the use of the screening tests. The law now says that in districts implementing transition programs, "children whose fifth birthday occurs between October 1 and December 31 of the school year may be enrolled in kindergarten[3] after an *appropriate* (emphasis ours) readiness evaluation has demonstrated that attendance in these programs will educationally benefit such children" (House Bill No. 946, 1990). It is relatively clear (through this work and from others, *e.g.*, Durkin, 1987) that simple testing with a commercial instrument cannot be necessarily construed as "appropriate". There is also ample data to argue that children *do not* benefit from such programs. If this is so, how can any "readiness evaluation" -- regardless of its appropriateness -- predict benefit? Perhaps there is hope for the children of Virginia beginning school after all.

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[3] We presume, but do not *know* at this writing whether the drafters of the law intended this term to be inclusive of "transition" programs.

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